

### **REMARKS**

Claims 1-20 are currently pending in the subject application and are presently under consideration.

Applicants' representative thanks Examiner Wang for the courtesies extended during the telephone interview of Monday, June 04, 2007. However, agreement with respect to the claims was not reached. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

#### **I. Rejection of Claims 1-20 Under 35 U.S.C. §101**

Claims 1-20 stand rejected under 35 U.S.C. §101 because the claimed innovation is directed to non-statutory subject matter. Withdrawal of this rejection is requested for at least the following reasons: The subject claims produce a useful, concrete and tangible result, and are directed to statutory subject matter. In particular, independent claim 1 (and similarly independent claim 14 and 20) recites *a system that facilitates free form digital inking, the system is recorded on a computer-readable medium and capable of execution by a computer, comprising: an annotation management component that generates an inking region for a digital document; and a navigation component that provides algorithms that enable manual and automatic re-positioning and re-sizing of the inking region relative to the digital document, the re-positioning and re-sizing of the inking region occurs prior to, concurrently with and after a user annotates the digital document.* In the Final Office Action (dated May 08, 2007), the Examiner argues that claim 1 applies a computer program in the form of a seemingly patentable apparatus or system. Applicants' representative respectfully disagrees with the Examiner as the claim includes ***functional descriptive material, rendering it structurally and functionally interrelated to a computer processor, and is directed to statutory subject matter.*** Further, the Examiner states that claim 1 fails to recite either a physical transformation or produce a useful and tangible result. Contrary to the Examiner's assertions, the subject claims recite an invention that provides a useful, concrete and tangible result. The legal standard set forth by the Federal Circuit in *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352 (Fed. Cir. 1999) for determining whether a claim is directed towards statutory subject matter is whether a claim can be applied in a practical application to produce a useful, concrete and tangible result. As mentioned *supra*, the subject claims clearly recite an invention that produces a useful, concrete,

and tangible result. In particular independent claim 1 (and similarly independent claims 14 and 20) in part recites a system that facilitates free form digital inking, comprising: *an annotation management component that generates an inking region for a digital document; and a navigation component that provides algorithms that enable manual and automatic re-positioning and re-sizing of the inking region relative to the digital document, the re-positioning and re-sizing of the inking region occurs prior to, concurrently with and after a user annotates the digital document.* In other words, the claimed subject matter relates to a system and a method that facilitates the ***practical application of free form digital inking.*** More particularly, the claimed invention relates to a system comprising of a various components (annotation management component and navigation component) that perform the function of “*generating an inking region*”, and “*re-positioning and re-sizing of the inking region relative to the digital document*” to facilitate the ***practical application of free form digital inking*** to produce a ***useful, concrete, and tangible result of annotating*** electronic documents, displayed by microprocessor-based devices such as desktop computers, Tablet PCs, PDAs, cell phones, and the like.

In view of at least the above, it is readily apparent that the claimed invention produces a useful, concrete, and tangible result pursuant to *AT&T Corp. v. Excel Communications, Inc.* Accordingly, this rejection should be withdrawn.

## **II. Rejection of Claims 1-20 Under 35 U.S.C §112**

Claims 1-20 stand rejected under 35 U.S.C §112, first paragraph, as failing to comply with the enablement requirement. The Examiner states that the claim(s) contain subject matter which was not described in the Specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In particular, the Examiner argues that the Applicant speculates the claim limitation “ manual and automatic re-positioning and re-sizing of the inking region relative to the digital document, the re-positioning and re-sizing of the inking region occurs prior to, concurrently with and after a user annotates the digital document”. Applicants’ representative respectfully disagrees. For example, the Specification discloses the following:

The navigation component 230 provides algorithms that enable ***manual and/or automatic re-positioning and/or re-sizing relative to the document*** in order to allow the user to add annotations

essentially anywhere on the document. *Such re-positioning and/or re-sizing can occur prior to, concurrently with or after annotating*; thus, the present invention provides for multi-scale navigation before, during and after annotating. The algorithms are based on a space-scale framework and include a create space, a move inking region, and a move document algorithm. The space-scale framework is based on geometric relationships between the inking region and the document being annotated.

The *create space algorithm automatically re-sizes and re-positions the inking region as the user annotates the document*. Typically, the *inking region automatically changes shape to create space as the user annotates near the edge of the inking region*. This can be achieved by extending the inking region while fixing a mapping between a source plane and a zoom plane and by moving the inking region center to a new center, wherein the inking region remains under the pen, but provides more space to continue annotating. (See, page 10, lines 18-31).

From the foregoing excerpts of the Specification, it is readily apparent that the Specification clearly describes a navigation component that provides algorithms that enable manual and automatic re-positioning and re-sizing of the inking region relative to the digital document, the re-positioning and re-sizing of the inking region occurs prior to, concurrently with and after a user annotates the digital document, as claimed. Therefore, a person having ordinary skill in the art could reasonably interpret the claimed subject matter in light of the specification. Furthermore, in the Final Office Action (dated May 8, 2007), the Examiner argues that the Specification (on page 20) teaches “a fixed zoom window”, and that “the zoom window corresponds to the document information, which is fixed after the annotation was made”. Applicants’ representative respectfully disagrees. For example, the Specification discloses the following:

... FIG. 9, an exemplary navigation methodology 900 (and corresponding space-scale diagram) *that moves a zoom window relative to a document during annotation*...

...as the user drags the zoom window, the zoom center, source center and source origin are concurrently translated, which ensures that a user can zoom any point in the underlying document as the zoom window is dragged from location to location. (See, page 16, lines 21-30, and page 17, lines 1-8).

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FIG. 10 illustrates an exemplary navigation methodology 1000 (and corresponding space-scale diagram) *that moves a document being annotated relative a zoom window...* This approach changes the portion of the document that is within the zoom window rather than moving the zoom window. (See, page 17, lines 8-21).

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FIG. 11 illustrates an exemplary navigation methodology 1100 (and corresponding space-scale diagram) *that automatically re-sizes and positions a zoom window as a user annotates a document...* the zoom window *automatically changes shape to create space as the user annotates near the edge of the zoom window.* (See, page 17, lines 22-28).

From the foregoing excerpts of the Specification, it is readily apparent that the Specification clearly teaches different annotation window location and navigation methodologies, including moving the zoom window relative to the document during annotation, fixing the zoom window and moving the document being annotated, and automatically changing shapes (re-sizing and re-positioning) to create space as the user annotates the document. This clearly shows that the Examiner interpretation of the Specification teaching a “fixed zoom window” is incorrect.

For at least the foregoing reasons, it is readily apparent that the claim(s) contain subject matter which is reasonably described in the Specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Accordingly, this rejection should be withdrawn with respect to claims 1-20.

### **III. Rejection of Claims 1, 2, 4-16 and 18-20 Under 35 U.S.C. §102(b)**

Claims 1, 2, 4-16 and 18-20 stand rejected under 35 U.S.C. §102(b) as being anticipated by Price et al. (2001/0043716). Withdrawal of this rejection is respectfully requested for at least the following reasons. Price et al. fails to disclose or suggest each and every element set forth in the subject claims.

For a prior art reference to anticipate, 35 U.S.C. §102 requires that “*each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.*” *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950 (Fed. Cir. 1999) (quoting *Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)).

Applicants’ claimed invention relates to a system and method that facilitates annotating digital documents (*e.g.*, word processing documents, images, *etc.*) displayed by microprocessor-based devices such as desktop computers, Tablet PCs, PDAs, cell phones, and the like. The systems and methods provide a focus plus context-based interface that enables multi-scale navigation during document annotation. This interface zooms a region of an underlying document, wherein a user can enter annotations in the region at a size comfortable to the user, and suitably scaled to the device display. More particularly, independent claims 1, 14 and 20 recite similar limitations, namely: a system that facilitates free form digital inking, comprising: *an annotation management component that generates an inking region for a digital document; and a navigation component that provides algorithms that enable manual and automatic re-positioning and re-sizing of the inking region relative to the digital document, the re-positioning and re-sizing of the inking region occurs prior to, concurrently with and after a user annotates the digital document.* Price *et al.* fails to disclose or suggest each and every aspect of the claimed invention.

Price *et al.* generally relates to a system and a method that enables free-form digital ink annotation of data traces and storage management of the data trace based upon the free-form digital ink annotations. More specifically, Price *et al.*, teaches a system that can *automatically select regions in the data trace based upon the position of the annotation and automatically summarize the data traces, and manage the storage of the data of a data trace based upon the freeform digital ink annotations.* For example, Price *et al.* discloses a display (item 50) of an annotated data trace (seismogram, item 52). The data trace (item 52) is annotated at 56, 58, 60, and 62. (See, Fig. 2A). Price *et al.* teaches a system that designates data traces corresponding to free-form digital ink annotations and presents a summary (See, Fig. 2B) of the data trace and manages the storage of the data trace underlying the data trace in accordance with the free-form digital ink annotations. *The summary only shows the data traces that correspond to freeform digital ink annotations.* Similarly, Fig. 3B is a summary of the audio data trace of Fig. 3A.

In the Final Office Action (dated May 08, 2007), the Examiner argues that Price *et al.* teaches a system comprising of “an annotation management component that generates an inking region for a digital document (See Figs. 2A-2B and 3A-3B wherein at least an inking region in Fig. 3B is generated and zoomed; see also Paragraph 0033 for zooming/scaling of the inking region)”. Appellants’ representative respectfully disagrees. The Examiner interprets the display of the summary of the data traces corresponding to the free-form digital ink annotations (Price *et al.*, Fig. 3B) with the zoomable inking region of the claimed invention. *This is an incorrect interpretation as selectively summarizing a particular data trace (corresponding to the free form digital ink annotations) and displaying the summarized data trace is not the same as generating an inking region, for annotating a digital document, which can be manually and/or automatically re-positioned or re-sized relative to the digital document.*

Further, the Examiner argues that Price *et al.* teaches a navigation component (Figs. 1, 6A-6B and 7-9; Paragraph 0044-0046) that provides algorithms that enable manual and automatic re-positioning and re-sizing of the inking region relative to the digital document, the re-positioning and re-sizing of the inking region occurs prior to, concurrently with and after a user annotates the digital document. At the indicated passages, Price *et al.*, merely teaches a flow chart (with various steps involved) outlining a control routine to *summarize the data trace*. For example, the flow chart (See Fig. 8), teaches various steps, including generating empty list of time ranges, adding time ranges, determining whether there are more annotations, sorting the time range, and so on to *return a display of a the summary of the data trace that correspond to free-form digital ink annotations*. This is significantly different from the claimed invention which relates to a system, comprising of a navigation component that provides algorithms that enable *manual and/or automatic re-positioning and/or re-sizing relative to the document* in order to allow the user to add annotations, wherein *such re-positioning and/or re-sizing can occur prior to, concurrently with or after annotating*. Accordingly, Price *et al.*, fails to disclose or suggest a system that facilitates free form digital inking, comprising of *a navigation component that provides algorithms that enable manual and automatic re-positioning and re-sizing of the inking region relative to the digital document, the re-positioning and re-sizing of the inking region occurs prior to, concurrently with and after a user annotates the digital document*. For at least the above reasons, the rejection of independent claims 1, 14 and 20 (and claims which depend there from) should be withdrawn.

**IV. Rejection of Claims 3 and 17 Under 35 U.S.C. §103(a)**

Claims 3 and 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Price et al. (2001/0043716) in view of N.O. Bouvin et al. “Fluid Annotations Through Open Hypermedia: Using and Extending Emerging Web Standards”. It is respectfully submitted that this rejection should be withdrawn for the following reasons. Price *et al.*, and Bouvin *et al.*, taken alone or in combination do not teach or suggest every element of the claimed invention.

To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second there must be a reasonable expectation of success. *Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.* See MPEP §706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art and not based on the Applicant’s disclosure. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added).

In particular, Bouvin *et al.* does not make up for aforementioned deficiencies of Price *et al.* with respect to independent claims 1 and 14 (which claims 3 and 17 depend respectively there from). Thus, the claimed invention as recited in claims 3 and 17 is not obvious over the combination of Price *et al.* and Bouvin *et al.* Therefore, it is respectfully submitted that this rejection be withdrawn.

**V. Rejection of Claims 1, 2, 4-16, and 18-20 Under 35 U.S.C. §103(a)**

Claims 1, 2, 4-16, and 18-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Marshall et al. (2003/0070139) in view of Nagae (6,230,169). It is respectfully requested that this rejection should be withdrawn for at least the following reasons. Marshall *et al.* and Nagae *et al.*, individually or in combination, do not teach or suggest each and every element as set forth in the subject claims.

To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second there must be a reasonable expectation of success. ***Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.*** See MPEP §706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art and not based on the Applicant's disclosure. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added).

Marshall *et al.* discloses systems and methods that detect and emphasize high-value free form annotations. The particular annotation style used by a particular user to create the annotations in a document is determined. This annotation style can be individual or a standardized style. Once the annotation style is determined, such that high-value annotation marks can be distinguished from low-value annotation marks, the annotations within the document are analyzed to locate the high-value annotation marks. (See page 1, paragraphs [0011]-[0014]). However, as conceded by the Examiner in the Final Office Action (dated May 08, 2007), Marshall *et al.* fails to disclose or suggest an annotation window for freeform annotation using digital inking. To cure this deficiency, the Examiner offers Nagae *et al.* As was stated in Applicants' Reply to the Office Action (dated February 6, 2007), and is reiterated herein, Nagae *et al.* does not make up for the aforementioned deficiencies of Marshall *et al.* with respect to independent claims 1, 14 and 20 (which claims 2, 4-13, 15, 16 and 18-19 respectively depend there from). More specifically, Nagae *et al.* fails to teach a system that provides focus plus context-based interface that enables multi-scale navigation during document annotation, the system comprising of a navigation component that provides algorithms that enable manual and/or automatic re-positioning and/or re-sizing relative to the document in order to allow the user to add annotations.

Nagae *et al.* merely discloses prompting a user to enter an annotation on a window with a coordinate input device, such as a table, reduce or enlarge the display image of the window with a specified magnification, and then display the window again. Nagae *et al.* teaches that the



annotation input window is ***fixed in size*** and that the user can enlarge or reduce the size of the window once displayed on the screen. (See, column 6, line 67, and column 7, lines 1-5). On the other hand, the claimed invention relates to a system that provides *algorithms that enable manual and automatic re-positioning and re-sizing of the inking region relative to the digital document, the re-positioning and re-sizing of the inking region occurs prior to, concurrently with and after a user annotates the digital document*. For example, the *inking region automatically changes shape to create space as the user annotates near the edge of the inking region*. Nagae *et al.* fails to disclose or suggest such automatic re-positioning and/or re-sizing relative to the document. Accordingly, Nagae *et al.* is silent with regard to *...a navigation component that provides algorithms that enable manual and automatic re-positioning and re-sizing of the inking region relative to the digital document, the re-positioning and re-sizing of the inking region occurs prior to, concurrently with and after a user annotates the digital document*

In view of the aforementioned deficiencies of the cited art, it is respectfully submitted that this rejection be withdrawn with respect to independent claims 1, 14 and 20 (and claims 2, 4-13, 15, 16 and 18-19 which depend respectively there from).

#### **VI. Rejection of Claims 3 and 17 Under 35 U.S.C. §103(a)**

Claims 3 and 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Marshall *et al.* (2003/0070139) in view of N.O. Bouvin *et al.* "Fluid Annotations Through Open Hypermedia: Using and Extending Emerging Web Standards". It is respectfully submitted that this rejection should be withdrawn for the following reasons. Marshall *et al.*, and Bouvin *et al.*, taken alone or in combination do not teach or suggest every element of the claimed invention.

To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second there must be a reasonable expectation of success. *Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.* See MPEP §706.02(j). The teaching or suggestion to

make the claimed combination and the reasonable expectation of success must be found in the prior art and not based on the Applicant's disclosure. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added).

In particular, Bouvin *et al.* does not make up for aforementioned deficiencies of Marshall *et al.* with respect to independent claims 1 and 14 (which claims 3 and 17 depend respectively there from). Thus, the claimed subject matter as recited in claims 3 and 17 is not obvious over the combination of Marshall *et al.*, and Bouvin *et al.* Therefore, it is respectfully submitted that this rejection be withdrawn.

**CONCLUSION**

The subject application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP592US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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